ELSEVIER

Journal of Inorganic Biochemistry 87 (2001) 277

JOURNAL OF Inorganic Biochemistry

www.elsevier.com/locate/jinorgbio

# Author Index of Volume 87

Albertini, R., 137
An, S., 97
Anzenbacher, P., 191
Anzenbacher, P., 209
Appanna, V.D., 1
Archakov, A.I., 175, 185

Banerjee, R., 245, 253
Bec, N., 191
Belicchi Ferrari, M., 137
Belkina, N.V., 197
Bernhardt, R., 197
Bi, S., 97, 105
Bisceglie, F., 137
Bulko, T.V., 185

Canales, J.J., 63
Champion, P.M., 215
Corbalán, R., 63
Counts Gerber, N., 267
Crichton, R.R., 9
Croom, J., 51

Dasgupta, T.P., 165
Denisov, I.G., 215
Di Risio, C., 21
Doucet, F.J., 71

Elkins, K.M., 81
Epperson, J.D., 149
Erceg, S., 63
Estabrook, R.W., 237
Exley, C., 45, 71

Faarinen, M., 57
Felipo, V., 63
Forbes, M.S., 15

Gan, N., 105
Garbossa, G., 21
Ghribi, O., 15
Gilep, A.A., 237
Gorren, A.C.F., 191
Green, E.L., 253
Guryev, O.L., 237

Hamel, R.D., 1
Hellborg, R., 57
Herman, M.M., 15
Hernandez-Viadel, M., 63
Hu, J., 105
Hudeček, J., 209
Hui Bon Hoa, G., 175
Hung, S.-C., 215

Ivanov, A.S., 197
Ivanov, Y.D., 175

Jugdaohsingh, R., 29
Jun, M.J., 157

Kanaeva, I.P., 175
Karuzina, I.I., 175
Kiisk, M., 57
Kim, K.M., 157
Kim, Y.-S., 157
Kosarikov, D.N., 267
Kucera, G.L., 129

Lange, R., 191
Lee, J.M., 267
Li, H., 105
Lindquist, N., 129
Lisurek, M., 197
Liu, F., 97, 105
Liu, J., 105
Llansola, M., 63
Loehr, T.M., 253

Magnusson, C.-E., 57
Manderville, R.A., 129
Mattsson, S., 57
Mayer, B., 191
McCrohan, C.R., 29
McLean, M.A., 215
Melvin, M.S., 129
Ming, L.-J., 149
Monfort, P., 63
Montoliu, C., 63
Munro, A.W., 191

Nelson, D.J., 81
Nesse, A., 21
Nicolini, C., 185

Park, S.-Y., 215
Pelosi, G., 137
Pérez, G., 21
Perry, C.C., 115
Persson, P., 57
Pinelli, S., 137
Podust, L.M., 227
Poulos, T.L., 227
Powell, J.J., 29

Rich, C.C., 129
Roberts, N.B., 37
Rotov, M.E., 71

Sagami, I., 261
Salim, N., 29
Saluta, G.R., 129
Sargazi, M., 37
Sato, Y., 261
Savory, J., 15
Schmid, R.D., 185
Schneider, C., 45
Schütz, A., 57
Shafran, K.L., 115
Shenkin, A., 37
Shimizu, T., 261
Shiro, Y., 215
Shumyantseva, V.V., 185
Skog, G., 57
Sligar, S.G., 175
Sligar, S.G., 215
Smith, J.N., 165
Sohn, Y.S., 157
Song, R., 157
Sorenson, J.R.J., 125
Stenström, K., 57
Stojan, J., 227

Tang, W., 97
Taoka, S., 245, 253
Tarasconi, P., 137
Taylor, I.L., 51
Thompson, R.P.H., 29

Usanov, S.A., 175, 185, 237
Uversky, V.N., 267

Vittori, D., 21

Wang, X., 105
Ward, R.J., 9
Waterman, M.R., 227
Weiss, K.E., 215
Wen, L., 97
White, K.N., 29
Wooton, K.E., 129

Xue, R., 97

Yang, L., 105
Yang, T., 105
Yang, X., 105
Yu, T., 105

Zhang, F., 105
Zhang, Y., 9

Elsevier Science B.V.
PII: S0162-0134(01)00402-0

ELSEVIER

Journal of Inorganic Biochemistry 87 (2001) 279–282

JOURNAL OF Inorganic Biochemistry

www.elsevier.com/locate/jinorgbio

# Subject Index of Volume 87

Accelerator mass spectrometry
$^{26}$Al investigations at the AMS-laboratory in Lund, 57
Active site
differences in flexibility of active sites of cytochromes P450 probed by resonance Raman and UV–Vis absorption spectroscopy, 209
$^{27}$Al NMR spectroscopy
the systematic study of aluminium speciation in medium concentrated aqueous solutions,
$Al_{13}$-mer
the systematic study of aluminium speciation in medium concentrated aqueous solutions,
Al tolerance
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
Al-26
$^{26}$Al investigations at the AMS-laboratory in Lund, 57
Aluminium
direct and indirect identification of the formation of hydroxyaluminosilicates in acidic solutions, 71
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
rapid non-equilibrium aluminium–ligand interactions: studies on the precipitation of aluminium by laser light scattering, ultrafiltration and centrifugation, 29
$^{26}$Al investigations at the AMS-laboratory in Lund, 57
Aluminium determination in aqueous samples
silicic acid ($Si(OH)_4$) is a significant influence upon the atomic absorption signal of aluminium measured by graphite furnace atomic absorption spectrometry (GFAAS), 45
Aluminium toxicity
disturbance of cellular iron uptake and utilisation by aluminium, 21
Aluminum
fluorescence and FT-IR spectroscopic studies of Suwannee river fulvic acid complexation with aluminum, terbium and calcium, 81
neuropeptide Y, peptide YY and aluminum in Alzheimer's disease:, 51
neurotransmitter dopamine applied in electrochemical determination of aluminum in drinking waters and biological samples, 105
Aluminum speciation
computer simulation of the distribution of aluminum speciation in soil solutions in equilibrium with the mineral phase imogolite, 97
Alzheimer's
neuropeptide Y, peptide YY and aluminum in Alzheimer's disease:, 51
Antitumor agents
synthesis, characterization and antitumor activity of quinolone–platinum(II) conjugates, 157
Apo-cytochrome $b_5$
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Arginine
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
L-ascorbic acid
mechanisms of nitric oxide release from nitrovasodilators in aqueous solution: reaction of the nitroprusside ion ($[Fe(CN)_5NO]^{2-}$) with L-ascorbic acid, 165
Atomic force microscopy
direct and indirect identification of the formation of hydroxyaluminosilicates in acidic solutions, 71
Bacillus
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^1$H NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
Calcium
fluorescence and FT-IR spectroscopic studies of Suwannee river fulvic acid complexation with aluminum, terbium and calcium, 81
Calmodulin
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Carbon monoxide
prion diseases: copper deficiency states associated with impaired nitrogen monoxide or carbon monoxide transduction and translocation, 125
Catalase
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Cells
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
Chaotropic agents
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Circular dichroism
role of conformational changes in the heme-dependent regulation of human soluble guanylate cyclase, 267
CO
characterization of NO binding to human cystathionine β-synthase, 245
$Co^{2+}$
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^1$H NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
CO binding
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Computer simulation
computer simulation of the distribution of aluminum speciation in soil solutions in equilibrium with the mineral phase imogolite, 97

Elsevier Science B.V.
PII: S0162-0134(01)00403-2

Conformational change
role of conformational changes in the heme-dependent regulation of human soluble guanylate cyclase, 267
Copper
copper-nuclease efficiency correlates with cytotoxicity for the 4-methoxypyrrolic natural products, 129
Copper deficiency
prion diseases: copper deficiency states associated with impaired nitrogen monoxide or carbon monoxide transduction and translocation, 125
Copper(II) complexes
new methyl pyruvate thiosemicarbazones and their copper and zinc complexes: synthesis, characterization, X-ray structures and biological activity, 137
Critical point of precipitation
rapid non-equilibrium aluminium–ligand interactions: studies on the precipitation of aluminium by laser light scattering, ultrafiltration and centrifugation, 29
Cryoradiolytic reduction
characterization of the oxygenated intermediate of the thermophilic cytochrome P450 CYP119, 215
$Cu^{2+}$
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^{1}H$ NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
CYP11B1
modelling of three-dimensional structures of cytochromes P450 11B1 and 11B2, 197
CYP11B2
modelling of three-dimensional structures of cytochromes P450 11B1 and 11B2, 197
CYP1A2
differences in flexibility of active sites of cytochromes P450 probed by resonance Raman and UV–Vis absorption spectroscopy, 209
CYP3A4
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
differences in flexibility of active sites of cytochromes P450 probed by resonance Raman and UV–Vis absorption spectroscopy, 209
CYP4A1
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
CYP51
substrate recognition sites in 14α-sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of *Mycobacterium tuberculosis* CYP51, 227
Cytochrome $b_5$
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Cytochrome P450
characterization of the oxygenated intermediate of the thermophilic cytochrome P450 CYP119, 215
construction and characterization of bioelectrocatalytic sensors based on cytochromes P450, 185
revelation of ternary complexes between redox partners in cytochrome P450-containing monooxygenase systems by the optical biosensor method, 175
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Cytochrome P450cam
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Cytoprotection
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
Cytotoxic activity
new methyl pyruvate thiosemicarbazones and their copper and zinc complexes: synthesis, characterization, X-ray structures and biological activity, 137
Differential pulse voltammetry
neurotransmitter dopamine applied in electrochemical determination of aluminum in drinking waters and biological samples, 105
DNA cleavage
copper-nuclease efficiency correlates with cytotoxicity for the 4-methoxypyrrolic natural products, 129
Dopamine
neurotransmitter dopamine applied in electrochemical determination of aluminum in drinking waters and biological samples, 105
Electron transfer
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Enzyme assays
mercuric chloride-induced spin or ligation state changes in ferric or ferrous human cystathionine β-synthase inhibit enzyme activity, 253
Enzyme electrode
construction and characterization of bioelectrocatalytic sensors based on cytochromes P450, 185
Etiology
neuropeptide Y, peptide YY and aluminum in Alzheimer's disease:, 51
Ferric cystathionine β-synthase
mercuric chloride-induced spin or ligation state changes in ferric or ferrous human cystathionine β-synthase inhibit enzyme activity, 253
Ferrous cystathionine β-synthase
mercuric chloride-induced spin or ligation state changes in ferric or ferrous human cystathionine β-synthase inhibit enzyme activity, 253
Fluorescence
role of conformational changes in the heme-dependent regulation of human soluble guanylate cyclase, 267
Formation constant
fluorescence and FT-IR spectroscopic studies of Suwannee river fulvic acid complexation with aluminum, terbium and calcium, 81
Fulvic acid
fluorescence and FT-IR spectroscopic studies of Suwannee river fulvic acid complexation with aluminum, terbium and calcium, 81
Glyoxylate
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
Graphite furnace atomic absorption spectrometry
silicic acid ($Si(OH)_4$) is a significant influence upon the atomic absorption signal of aluminium measured by graphite furnace atomic absorption spectrometry (GFAAS), 45
Haem synthesis
disturbance of cellular iron uptake and utilisation by aluminium, 21
Haemoglobin synthesis
disturbance of cellular iron uptake and utilisation by aluminium, 21
Heme reduction
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
Hemoglobin
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
High pressure
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Homocysteine
characterization of NO binding to human cystathionine β-synthase, 245

Human cystathionine β-synthase
characterization of NO binding to human cystathionine β-synthase, 245
Hydroxyaluminosilicates
direct and indirect identification of the formation of hydroxyaluminosilicates in acidic solutions, 71
Hydroxypolymerization
rapid non-equilibrium aluminium–ligand interactions: studies on the precipitation of aluminium by laser light scattering, ultrafiltration and centrifugation, 29
Immobilization
construction and characterization of bioelectrocatalytic sensors based on cytochromes P450, 185
Imogolite
computer simulation of the distribution of aluminum speciation in soil solutions in equilibrium with the mineral phase imogolite, 97
Inhibition kinetics
mercuric chloride-induced spin or ligation state changes in ferric or ferrous human cystathionine β-synthase inhibit enzyme activity, 253
Iron metabolism
disturbance of cellular iron uptake and utilisation by aluminium, 21
Isocitrate lyase
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
K562 cell line
disturbance of cellular iron uptake and utilisation by aluminium, 21
α-Ketoglutarate dehydrogenase complex
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
Kidney
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
Lanosterol modeling
substrate recognition sites in 14α-sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of *Mycobacterium tuberculosis* CYP51, 227
Laser light scattering
rapid non-equilibrium aluminium–ligand interactions: studies on the precipitation of aluminium by laser light scattering, ultrafiltration and centrifugation, 29
Low homology modelling
modelling of three-dimensional structures of cytochromes P450 11B1 and 11B2, 197
Low temperature spectroscopy
characterization of the oxygenated intermediate of the thermophilic cytochrome P450 CYP119, 215
Matrix modifier
silicic acid ($Si(OH)_4$) is a significant influence upon the atomic absorption signal of aluminium measured by graphite furnace atomic absorption spectrometry (GFAAS), 45
Mercuric chloride
mercuric chloride-induced spin or ligation state changes in ferric or ferrous human cystathionine β-synthase inhibit enzyme activity, 253
Morin fluorescence
direct and indirect identification of the formation of hydroxyaluminosilicates in acidic solutions, 71
Myoglobin
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
NADPH oxidation
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
Neuropeptide Y
neuropeptide Y, peptide YY and aluminum in Alzheimer's disease:, 51
Nitric oxide
mechanisms of nitric oxide release from nitrovasodilators in aqueous solution: reaction of the nitroprusside ion ($[Fe(CN)_5NO]^{2-}$) with L-ascorbic acid, 165
role of conformational changes in the heme-dependent regulation of human soluble guanylate cyclase, 267
Nitric-oxide synthase
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
use of high pressure to study elementary steps in P450 and nitric oxide synthase, 191
Nitrogen monoxide
prion diseases: copper deficiency states associated with impaired nitrogen monoxide or carbon monoxide transduction and translocation, 125
NMR
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^1$H NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
NO
characterization of NO binding to human cystathionine β-synthase, 245
Optical biosensor
revelation of ternary complexes between redox partners in cytochrome P450-containing monooxygenase systems by the optical biosensor method, 175
Oxalate
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
Oxyferrous heme complex
characterization of the oxygenated intermediate of the thermophilic cytochrome P450 CYP119, 215
P450
differences in flexibility of active sites of cytochromes P450 probed by resonance Raman and UV–Vis absorption spectroscopy, 209
P450 structure
apo-cytochrome $b_5$ as an indicator of changes in heme accessability, 237
Peptide YY
neuropeptide Y, peptide YY and aluminum in Alzheimer's disease:, 51
Phospholipase C
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^1$H NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
Platinum
synthesis, characterization and antitumor activity of quinolone–platinum(II) conjugates, 157
Potentiometry
the systematic study of aluminium speciation in medium concentrated aqueous solutions,
Prion diseases
prion diseases: copper deficiency states associated with impaired nitrogen monoxide or carbon monoxide transduction and translocation, 125
Prodigiosin
copper-nuclease efficiency correlates with cytotoxicity for the 4-methoxypyrrolic natural products, 129
PTC
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
Quinolone
synthesis, characterization and antitumor activity of quinolone–platinum(II) conjugates, 157
Resonance Raman spectroscopy
differences in flexibility of active sites of cytochromes P450 probed by resonance Raman and UV–Vis absorption spectroscopy, 209

Semisynthetic flavocytochrome
construction and characterization of bioelectrocatalytic sensors based on cytochromes P450, 185
Silicic acid
silicic acid ($Si(OH)_4$) is a significant influence upon the atomic absorption signal of aluminium measured by graphite furnace atomic absorption spectrometry (GFAAS), 45
Silicon
direct and indirect identification of the formation of hydroxyaluminosilicates in acidic solutions, 71
Site-directed mutagenesis
critical role of the neuronal nitric-oxide synthase heme proximal side residue, Arg418, in catalysis and electron transfer, 261
Sodium nitroprusside
mechanisms of nitric oxide release from nitrovasodilators in aqueous solution: reaction of the nitroprusside ion ($[Fe(CN)_5NO]^{2-}$) with L-ascorbic acid, 165
Soil solutions
computer simulation of the distribution of aluminum speciation in soil solutions in equilibrium with the mineral phase imogolite, 97
Soluble guanylate cyclase
role of conformational changes in the heme-dependent regulation of human soluble guanylate cyclase, 267
Sterol demethylation
substrate recognition sites in 14α-sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of *Mycobacterium tuberculosis* CYP51, 227
Substrate recognition
substrate recognition sites in 14α-sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of *Mycobacterium tuberculosis* CYP51, 227
Sulphate-ions
the systematic study of aluminium speciation in medium concentrated aqueous solutions,
Tambjamine
copper-nuclease efficiency correlates with cytotoxicity for the 4-methoxypyrrolic natural products, 129
TCA cycle enzymes
modulation of TCA cycle enzymes and aluminum stress in *Pseudomonas fluorescens*, 1
Terbium
fluorescence and FT-IR spectroscopic studies of Suwannee river fulvic acid complexation with aluminum, terbium and calcium, 81
Ternary complexes
revelation of ternary complexes between redox partners in cytochrome P450-containing monooxygenase systems by the optical biosensor method, 175
Thiosemicarbazones
new methyl pyruvate thiosemicarbazones and their copper and zinc complexes: synthesis, characterization, X-ray structures and biological activity, 137
Toxicity
in-vitro studies of aluminium-induced toxicity on kidney proximal tubular cells, 37
Trinuclear
cobalt(II) and copper(II) binding of *Bacillus cereus* trinuclear phospholipase C: a novel $^1$H NMR spectrum of a 'Tri-Cu(II)' center in protein, 149
Ultrafiltration
rapid non-equilibrium aluminium–ligand interactions: studies on the precipitation of aluminium by laser light scattering, ultrafiltration and centrifugation, 29
X-ray structure
substrate recognition sites in 14α-sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of *Mycobacterium tuberculosis* CYP51, 227
Zinc complexes
new methyl pyruvate thiosemicarbazones and their copper and zinc complexes: synthesis, characterization, X-ray structures and biological activity, 137